

Demonstration of Chain Reaction With a Model, by S. N.
Sokolov, L. N. Erastov, 2 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No 1, 1960,
pp 377, 378.

AIP
Sov Phys.-Uspekhi
Vol III, No 1

Sci
Nov 60

Lecture Experiment on Determination of the Specific
Heat of a Gas at Constant Pressure, by S. N. Sokolov,
L. N. Erastov, 2 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No 1, 1960,
pp 379, 380.

AIP
Sov Phys--Uspekhi
Vol III, No 1

Sci
Nov 60

Nonlinear Phenomena in a Plasma Located in an Alternating Electronic Field, by V. L. Ginzburg, A. V. Gurevich, pp 19.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No ³~~2~~, 1960, pp 393-428.

AIP
Sov Phys-Uspekhi
Vol III, No 2

Sci
Nov 60

132, 485

New Experimental Data on π and K -Meson Decays, by
A. V. Vaysenberg, 34 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No 3, 1960,
pp 429-488.

AIP
Sov Phys-Uspekhi
Vol III, No 2

132, 486

Sci
Nov 60

Investigations of Cosmic Rays and Terrestrial
Corpuscular Radiation During the Flights of
Rockets and Satellites, by S. N. Vernov, A. ~~Ye.~~
Ye. Chudakov, ~~3-85~~ 85 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXX, No 4,
1960, pp 585-619.

~~100~~

JPAS 7327

~~078-22-131632-126~~

Sci - Geophys, Space Res
Aug 60

122,441

AP
See P. 122, 441
Uspekhi
Fiz. Nauk

Conversion of Thermal Energy Into Electricity With
the Aid of Thermoelectric Emission, by N. D.
Morgulis, 12 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No 2, 1960,
pp 679-692.

AIP
Sov Phys-Uspekhi
Vol 111, No 2

Sci
Nov 60

132, 488

Strong Magnetic Fields, report. by G. V. Kravtsov, 12 pp

Uspokhi, per, Uspokhi, Fiz. Nauk, Vol III, No 2, 1960,
pp 693-711.

AIP
Sov Phys - Uspokhi
Vol III, No 2

Sci
Nov 60

132, 491
AC 21 14-8454
ID-2162093

Conference on the Physics of Alkali-Halide Crystals,
by F. Almeret, Ch. Lushchik, 4 pp

RUSSIAN, per, Uspekhi. Fiz Nauk, Vol LXX, No 4, 1960,
pp 733-738.

AIP
Nov Phys - Uspekhi
Vol III, No 2

Sci
Nov 60

132, 492

Physics in the Plans of Fizmatgiz for 1960,
5 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXX, No ¹¹2, 1960,
pp 739-746.

AIP
Sov Phys - Uspekhi
Vol III, No 2

Sci
Nov 1960

132, 489

The Overhauser Effect and Related Phenomena, by G. R.
Khutsishvili, 35 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1, 1960,
pp 9-.

Amer Inst of Phys
Sov Phys-Uspekhi
Vol III, No 3

Sci - Phys

Feb 61

137, 239

Double-Time Green Functions in Statistical Physics,
by D. E. Zubarev, 26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1, 1960,
pp 71-.

AIP
Sov Phys-Uspekhi:
Vol XXI, No 3

Sci - Phys

Feb 61

139,240

(NY-537⁵*)

Third Conference on the Theory of Semiconductors,
by A. Ye. Glaubergerman, I. V. Smasyuk, 53 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
May 1960, pp 117-130.

JPRS 7361

AIP

Sci - Phys

Soviet Phys-Uspen
Vol 5, No 3

Jan 61

138,709

(RY-5375)

Eighth All-Union Conference on Luminescence, by
H. A. Berisevich, M. A. Yel'yashevich, B. I.
Stepanov, ~~30 pp.~~ 26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
1960, pp 131-136.

JPRS 7362

Sci - Phys

137,827

Jan 61

(NY-5375)

Intramolecular Transfer of Energy by Triplet Levels,
by V. L. Yermolayev, A. N. Terenin, 14 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
May 1960, pp 137-141.

JPRS 7362

Sci - Phys

Feb 61

139, 224

(NY-5375)

On the Question of the Role of Defects in the
Process of Excited Luminescence of Molecular
Crystals, by V. M. Agranovich, 30 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXXI, No 1,
May 1960, pp 141-149.

JPRS 7362

Sci - Phys

Feb 61

139, 225

(NY-5375)

Chemiluminescence of Chlorophyll During Chemical
Reactions, by F. P. Litvin, Yu. A. Vladimirov,
A. A. Krasnovskiy, ~~XXXXXX~~ 22 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 2,
May 1960, pp 149-156.

JPRS 7362

Sci - Phys

Feb 61

139, 226

(NY-5375)

On the Interactions of Electron and Oscillatory
Movements in Complex Molecules, by M. A.
Yel'yashevich, 16 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
May 1960, pp 156-160.

JPRS 73621

Sci - Phys

Feb 61

139,227

Sergei Tikhonovich (On his Seventieth Birthday),
by G. S. Zhdanov, 5 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
1960, pp 161-.

AIP
Sov Phys-Uspekhi
Vol III, No 3

USSR

Biog

Feb 61

139, 244

A Classical Book on the Theory of Nonlinear
Vibrations, by M. A. Aizerman, 4 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 1,
1960, pp 167-
167.

AIP
Sov Phys-Uspekhi
Vol III, No 3

Sci - Phys

Feb 61

139, 246

Light Scattering in the Earth's Atmosphere, by
G. V. Rozenberg, 26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 2, 1960,
pp 173-.

AIP
Sov Phys-Uspekhi
Vol III, No 3

Sci - Phys

Feb 61

139,241

Line Fluorescence Spectra of Organic Compounds and
Their Applications, by E. V. Shpol'skiy, 18 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk. Vol LXXI, No 2,
1960, pp 215-.

AIP
Sov Phys-Uspekhi
Vol III, No 3

Sci - Phys

Feb 61

139, 242

The Production of Negative Ions in Atomic
Collisions, by Ya. M. Fogel', 27 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 2, 1960,
pp 243-.

AIP
Sov Phys-Uspekhi
Vol III, No 3
H. L. K. F. Tr-57

Sci - Phys

Feb 61

139, 243

(Soviet)

Sixth All-Union Meeting on Low Temperature Physics.
by R. Chentsov, 27 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 2, 1960,
pp 339-347.

JPRS 5966

Sci - Phys

Nov 60

131, 5-36

Leonid Aleksandrovich Kubetskiy, by N. S.
Khelebnikov, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, No 2,
1960, pp 351-.

AIP
Sov Phys Uspekhi
Vol III, No 3

BSSR

Biog

Feb 61

139, 245

Investigation of the Ionosphere and of the Interplanetary Gas With the Aid of Artificial Satellites and Space Rockets, by Ya. L. Al'pert, 25 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol. LXXI, 1960, pp 369-409.

AIP
Soviet Phys - Uspekhi
Vol III, No 4

Sci - Space Research

Apr 61

Fission of Heavy Nuclei With Emission of Long-Range
Particles, by N. A. Perfilov, Yu. F. Romanov, Z. I.
Solov'yeva, 9 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, 1960,
pp 471-483.

AIP
Soviet Phys - Uspekhi
Vol III, No 4

Sci - Phys

Apr 61

Nikolay Nikolayevich Andreyov (on his eightieth birthday), by L. A. Chernov, 4 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol. LXXI, 1960, pp 525-528.

AIP
Soviet Phys - Uspekhi
Vol LXXI, No 4

USSR

Biog

Apr 61

Spin Waves in Ferrromagnets and Antiferromagnets. I.,
by A. I. Akhiezer, V. G. Bar'vakhtar, M. I. Kaganov,
26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXII, 1960,
pp 533-579.

AIP
Soviet Phys - Uspekhi
Vol III, No 4

Sci - Phys

Apr 61

Electric Breakdown of Gases at Pressures Close to
Atmospheric Pressure, by I. S. Marshak, 23 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, 1960,
pp 631-675.

PIP
Soviet Phys - Uspekhi
Vol III, No 4

Sci - Phys

Apr 61.

Georgiy Ivanovich Skanavi, by B. M. Vul, E. A.
Konorova, A. I. Demeshina, 3 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXI, 1960,
pp 631-635.

RIP
Soviet Phys - Uspekhi
Vol III, No 4

USSR

Biog

Apr 61

Spin Waves in Ferromagnets and Antiferromagnets. II,
by A. I. Akhiezer, V. G. Bar'yakhtar, M. I. Kaganov,
16 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol. LXXII, 1960,
pp 3-32.

HIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

Shock Waves in Magnetohydrodynamics, by R. V. Polovin,
12 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol. LXXII, 1960,
pp 33-52.

HIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

Low-Voltage Halogen Counters (Mechanism of Discharge),
by V. V. Vishnyakov, T'ang Hsiao-Wei, A. A. Tyapkin,
13 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 133-152.

RIP
Soviet: Phys - Uspekhi
Vol LII, No 5

Sci - Phys

Apr 61

147,181

(DC-5533)

Sergey Nikolayevich Vernov, 5 pp.

RUSSIAN, per, Uspekhi Fiz. Nauk, Vol LXXII, No 1,
1960, pp 153-155.

JPRS 8432

USSR

Biog

Jun 61

155, 034

Generation, Amplification, and Detection of Infrared
and Optical Radiation by Quantum-Mechanical Systems,
by N. G. Basov, O. N. Krokhin, Yu. M. Popov,
27 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 161-209.

AIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

147,178

Undiscovered Isotopes of Light Nuclei, by A. I. Baz',
V. I. Gol'danskiy, Ya. B. Zel'dovich, 14 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 211-234.

RIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

147,179

Propagation and Generation of Low-Frequency Electro-
magnetic Waves in the Upper Atmosphere, by B. N.
Gershman, V. A. Ugarov, 22 pp.

RUSSIAN, par, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 235-271.

AIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

147,180

The Investigation of Diffusion in Metal Oxides by
Means of Radioactive Tracers, by M. S. Gorbunov, V. I.
Iavtchov, 20 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 273-306.

AIP
Soviet Phys - Uspekhi
Vol III, No 5

Sci - Phys

Apr 61

(DC-5008)

Abram Fedorovich Ioffe (On His 80th Anniversary),
by I. K. Kikoin, M. S. Sominskiy, 26 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, No 2,
Oct 1960, pp 307-321.

JPRS 6981

USSR

Biog

Apr 61

146,039

Resonance Scattering of Gamma Rays in Crystals, by
G. N. Belozerskiy, Yu. A. Nemilov, 19 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 433-466.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,619

Electroluminescence, by M. V. Fock, 8 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 467-478.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,621

Dislocations in Semiconductor Crystals, by E. Yu.
Kokorish, N. N. Sheftal', 10 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 479-494.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sol

Jun 61

155,620

Periodic Phenomena in Photosynthesis, by N. M.
Chernavskaya, D. S. Chernavskiy, 16 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 627-652.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

155,622

Jun 61

Recoilless Resonance Absorption of Gamma Quanta in Solids, by Rudolf L. Mössbauer, 9 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960, pp 657-671.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,615

On the Weight of Photons, by R. V. Pound, 6 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 673-683.

AIP

Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,617

1

The Mössbauer Effect, by F. L. Shapiro, 7 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 685-696.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155, 616

Investigation of the Thermal Structure of Helium II
by Scattering of Cold Neutrons, by E. L. Andronikashv.
7 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 697-710.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,618

Characteristic Times of Electronic Processes in
Semiconductors, by G. M. Guro, 17 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 711-740.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,607

On the Relaxation of Nonequilibrium Gas Systems, by
L. V. Leskov, P. A. Savin, 16 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 741-764.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

155,609

Jun 61

The Classification of the Elementary Particles, by
D. Ivanenko, A. Startsev, 21 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 765-798.

AIP
Sov Phys - Uspekhi
Vol III, No 6

Sci

Jun 61

155,608

Seventh All-Union Conference on Low-Temperature Physics
by N. Chentsov, 9 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXII, 1960,
pp 817-826.

AF - 1471014

AIP

Sov Phys - Uspekhi
Vol III, No 6

Sci

155, 610

Jun 61

Fluctuations of Electromagnetic Waves in the
Troposphere, by F. G. Bass, S. Ya. Brande, E. A.
Kaner, A. V. Men, 55 pp.

RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXIII,
Iss No 1, 1961, pp 89-119.

FTD
*AEC 18CL-1263/1-2

Sci - Geophys, Phys

Jun 61

6-2302

62-19031

Rukhadze, A. A. and Silin, V. P.
ELECTRODYNAMIQUE DES MILIEUX A DISPERSION
SPATIALE (Elektrodinamika Sred s Prostranstvennoi
Dispersiei) [Electrodynamics of Media with Spatial
Dispersion] tr. by Fedorovsky. 10 Oct 61 [116]p.
(Russian text included) 49 refs. CEA Trans. no. R 1425
(text in French).
Order from CTS or SLA \$9.60

62-19031

Trans. in French of 'Usp[ekhi Fizicheskikh Nauk]
(USSR) 1961, v. 74 [no. 2, p. 223]-267.

DESCRIPTORS: *Electric currents, *Electromagnetism,
Monochromatic light, Magnetic fields.

(Physics--Electricity, TT, v. 8, no. 3)

I. Rukhadze, A. A.
II. Silin, V. P.
III. CEA-tr-R1425
IV. Commissariat à l'Énergie
Atomique (France)

Office of Technical Services

The Microtron, by A. P. Grinberg, 66 pp.
Vol LXXV,
RUSSIAN, per, Uspelhi Fiz Nauk, No 3,
1961, pp 421-458. 9676340

FED-TT-62-211

Sci - Phys

4 May 62

193,984

Physical Properties of Metals of High Purity, by R. L. Garber,
I. A. Oindin,
RUSSIAN, per, Uspekhi Fiz Nauk, No 5, 1961.

GB/39/M/26037

Sci - M/M

Feb 64

250,507

S-776/62

Third International Symposium on the Investigation
of Cosmic Space (Washington, 1-8 May 1962), by
K. Ya. Kondrat'yev. (SF-2417)

RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol LXXVIII,
No 1, Sept 1962, pp 167-179.

*JPRS 16749

Sci/Space Research

6 Nov 62

NEUTRAL HYDROGEN IN THE EARTH'S ENVIRONS AND IN
INTERPLANETARY SPACE, BY V. G. KURT, 36 PP.

RUSSIAN, PER, USPEKHI FIZICHESKIKH NAUK, VOL LXXXI,
NO 2, OCT 1963, PP 249-270.

JPRS 22331

SCI-EAR SCI

DEC 63

244,322

Fifth Interdepartmental Conference on Atmospheric Optics
and Actinometry, by G. Rozenberg, 14 pp.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol LXXXI, No 3, 1963,
Nov, pp 566-573.

JPRS 23547

Sci - Har Sci
Mar 64

251, 415

Radio Emissions and the Nature of the Moon, by
V. D. Krotikov, V. S. Troitskiy, 68 pp.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXXI, No 4,
Dec 1963, pp 589-639. 9200180; 9220529
NASA TT F-8837

Sci - KMX E. S. & Ast
Apr 64
U. S. GOVERNMENT ONLY

253,759

State of the Art and Certain New Developments in
the Molecular Beam Method, by V. B. Leonas.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXXII, No 2,
1964, pp 287-323.
NASA TT F-8879

Sci-Phys

Jul 64

U.S. GOVERNMENT ONLY

260,975

Investigation of Cosmic Ray Intensity Fluctuations
in the Stratosphere Caused by Solar Processes,
by A. N. Charakhch'yan, 41 pp.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXXIII, No 1,
May 1964, pp 35-62.
JPRS 25641

NASA-TT-F-9027 (U.S. Government Only)

Sci - HS & Ast
Aug 64

264,669

Yakov Borisovich Zel'dovich Combustion Studies,
by Ya. A. Smorodinskiy, D. A. Frank-Kamenetskiy, 21 pp.
RUSSIAN, per, Uspekhi Fiz Naik, Vol LXXXII, No 3, 1964,
pp 567-574. 9696376
FSTC 381-T64-44

Sci - Phys
Apr 65

276,366

Investigations of the Nuclear Component of
Cosmic Rays Made on Soviet Satellites and
Rockets, by V. L. Ginzburg, L. V. Kurnosova,
et al, 100 pp.
RUSSIAN, per, Uspekhi Fizik Nauk, Vol LXXXII,
No 4, 1964, pp 585-647.
JPRS 25029

Sci - Aerospace
Jun 64

261,021

Quasi-Optical Methods for the Shaping and Transmission of Millimetric Waves, by B. Z. Katsenelenbaum.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXXIII, No 1,
1964, pp 81-105.
NASA TT F-9028

Sci-Phys

Oct 64

U.S. GOVERNMENT ONLY

267-568

Stimulated Combination Scattering of Light, by
V.A. Zubov, M.M. Sushchinskiy, et al.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol 83,
No 2, 1964, pp 197-222. P100017466
FTD-MT-65-49

Sci/Physics
Sep 66

309,382

The Tenth All-Union Conference on Low Temperature Physics, 87 pp.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Vol 83,
No 2, 1964, pp 361-369. P100017466
FTC-RT-65-49

Sci/Physics
Sep 66

309,383

JPRS CSO: 22057

22057
18 Oct 67

Uspekhi Fizicheskikh Nauk, Vol 84, No 3,
Nov 1964, pp 431-450, by V.S. Vavilov,

"Nature and Energy Spectrum of Radiation
Perturbations in Semiconductors"

RUSSIAN, per,

All-Union Conference on Dislocations and
Mechanical Properties of Crystals, by M. V.
Klassen-Maklyudova, 6 pp.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk,
Vol 84, No 2, Oct 1964, pp. 363-365.
JPRS 30496

USSR
Sci-Misc
Jun 65

231,603

Preface to Volume I and II of the Russian Edition
of the Book "Advances in Cancer Research", by
L. M. Shabad, 17 pp.

RUSSIAN, bk. Uspekhi v Issledeniy Raka, 1955,
Vol I, pp 3-6; Vol II, pp 3-8. CIA 197112

NIH

RT 4552

Sci - Medicine, oncology
Sep 55 CTS/lex

38,514

Progress of Thermal Production Method for
Phosphorus and Phosphoric Acid, by N. E.
Pestov and A. I. Sherashvskiy, 19 pp.

RUSSIAN, par, Uspekhi Khim, Vol IV, 1934,
pp 610-624.

SLA R-2546

Sci

Aug 58

72,963

Plets, B. M. REVIEW OF ORGANIC COMPOUNDS OF PHOSPHORUS. [1961] [59]p. 244 refs. Order from LC or SLA m1\$3.60, ph\$9.30 61-10851 Trans. of Uspekhi Khimii (USSR) 1935, v. 4, no. 4, p. 573-609. (Unannounced)	61-10851 1. Phosphorus compounds (Organic)--Properties 1. Plets, B. M. 108510 Office of Technical Services
--	--

Carbon Suboxide, by M. V. Vol'kenshtein, 19 pp.
RUSSIAN, par, Uspekhi i Khim, Vol IV, 1935, pp 610-31.

NOT RELEASABLE TO FOREIGN NATIONALS

CIA/FDD XX-437

Sci - Chen
Apr 58

IAC INTERNAL USE ONLY

62,457

Surface Tension of Molten Metals and Alloys by
V. L. Semanchenko ², N. L. Pokrovski, 66 pp.

RUSSIAN, No per, Uspekhi Khimii, Vol VI, No 6,
1937, pp 777-821.

CIA 1262

REL Tr 190

RT-1002

178/60

(NY-4689)

Free Hydroxyl, by V. N. Kondrat'yev, 90 pp.

RUSSIAN, per, Uspekhi Khim, Vol VIII, No 2, 1939,
pp 195-240.

JPRS 5420

Sci - Chem

Oct 60

127,269

Primary Products of the Radiolysis of Water
and Their Reactivities, by A. K. Pikayan.
RUSSIAN, per, Uspekhi Khimii, Vol 8, No 36,
pp 1427-1456.

*ACSI J-4838

*FSIC HT-23-136-68

Sol-Chem
May 68

UNCLASSIFIED
Synthetic Diamonds, by O. I. Leipunski, 15 pp.

Full translation.

RUSSIAN, per, Uspekhi Khim., Vol VIII, No 10, USSR,
1939, pp 1519-1934.

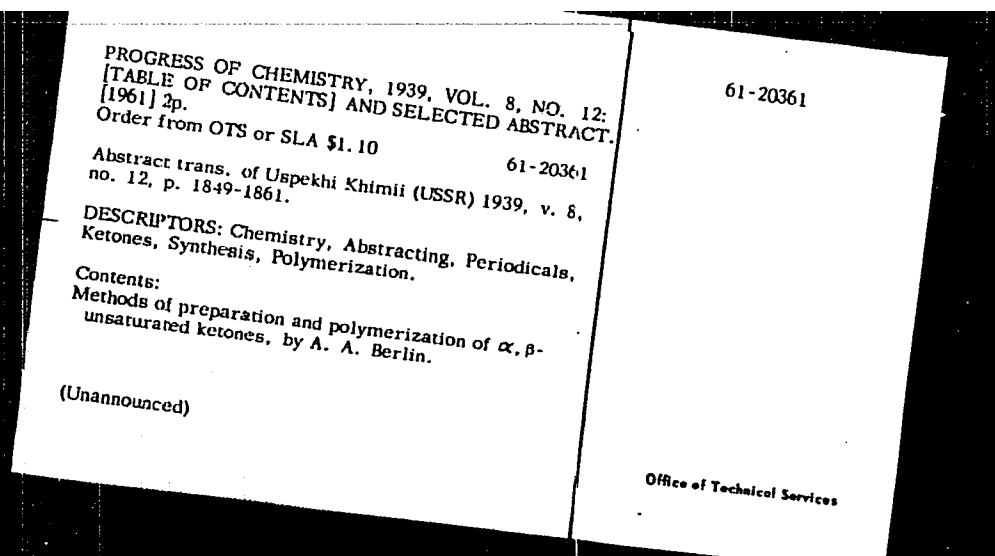
Navy Tr 609/NRL 348

AT-1000 Jun 52 CTS

Scientific - Chemistry

DEX

49/412
ATS-66P64R.MRT-3895



Progress in the Chemistry of Scandium in the Past
Ten Years, by V. V. Shcherbrina, 10 pp.
UNCLASSIFIED

RUSSIAN, per, Uspekhi Khim, Vol IX, 1933 - 1937,
1940.

CIA/FDD/K-917

Scientific - Chemistry
JUN 53 CTS/DEX

2680

Petrov, A. D. and Azatyan, V. D.
SYNTHESIS OF HYDROCARBONS OF THE ACETYLENE SERIES. [1961] [14]p. 115 refs.
Order from OTS or SLA \$1.60

61-16870

Trans. of Uspekhi Khimii (USSR) 1940, v. 9, no. 5,
p. 498-521.

DESCRIPTORS: *Hydrocarbons, *Acetylenes,
Synthesis.

The first part of a program of synthesis of acetylenes and evaluation of their antiknock properties is reported. The literature on the subject is reviewed, physical constants of 57 known acetylenes are tabulated and a bibliography given comprising 115 items including unpublished work of the author and his co-workers. Blending octane numbers of five acetylenes were obtained. (Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16870

I. Petrov, A. D.
II. Azatyan, V. D.

101700

Official Technical Services

Petroleum as a Source of Raw Material for
Preparation of Rubber-Foaming Compounds, by
M. A. Lur'ye.

RUSSIAN, per, Uspekhi Khim, Vol XL, No 6, 1940,
pp 609-628.

OTS 61-16874

Sci
Mar 62

Vol VII, No 2

189,527

Shatenshteyn, A. L.
CHIMIE DES SOLUTIONS DANS L'AMMONIAC
LIQUIDE, tr. by M. Fedorovsky. 27 Oct 60 (14)p.
21 refs. CEA Trans. no. R 1052 (text in French).
Order from OTS or SLA \$1.60 61-15795

Trans. in French of Usp[ekhi] Khim[ii] (USER) 1940
[v. 9] p. 950-954.

DESCRIPTORS: *Ammonia, *Liquefied gases, Gas,
Solubility, *Solutions, Solvent action.

61-15795

I. Shatenshteyn, A. L.
II. CEA-tr-R1052
III. Commissariat à l'Énergie
Atomique (France)

16970

Office of Technical Services

(Chemistry--Physical, TT, v. 6, no. 2)

Plate, A. F. CATALYTIC AROMATIZATION OF PARAFFIN HY- DROCARBONS. [1961] 2op. 82 refs. Order from OTS or SLA \$2.60 61-16877 Trans. -I Uspelid Ydmlu (USSR) 1946, v. 9, no. 11/12, p. 1301-1332. DESCRIPTORS: *Hydrocarbons. *Aliphatic compounds. Synthesis, Catalysis. The experimental material on catalytic aromatization of paraffins reported in the scientific and patent literature up to 1946 is reviewed, giving a brief history of the problem and citing some early Russian work on the sub- ject. This material is far from exhausting the problem, and much information in this field remains unstated or hidden behind patent claims. (Author) (Chemistry--Organic, TT, v. 6, no. 7)	61-16877 I. Plate, A. F. 16172 Office of Technical Services
---	---

Progress in the Chemistry of Scandium During the
last Ten Years, by V. V. Tscherbina, 17 pp.
UNCLASSIFIED
RUSSIAN, no per, Uspekhi Khim, Vol IX, 1940, pp 1333--.

AEC 3111

Sci - Chem

Feb 58

58, 094

61-20359

PROGRESS OF CHEMISTRY, 1941, VOL. 10, NO. 1:
[TABLE OF CONTENTS] AND SELECTED AB-
STRACT. [1961] 3p. 15 refs.
Order from OTS or SLA \$1.10

61-20359

Abstract trans. of Uspekhi Khimii (USSR) 1941, v. 10,
no. 1, p. 1-5.

DESCRIPTORS: Chemistry, Abstracting, *Oxidation,
*Carbon compounds, *Monoxides.

(Chemistry, TT, v. 7, no. 5)

Office of Technical Services

Balandin, A. A.
CATALYSIS AND THE CHANGE OF MOLECULAR
FORM. [1961] 34p. 132 refs.
Order from OTS or SLA \$3.60 61-16915

Trans. of Uspekhi Khimii (USSR) 1941, v. 10,
p. 262-293.

DESCRIPTORS: *Catalysis, Molecular structure,
Hydrocarbons, Dehydrogenation, Hydrogenation,
*Molecular isomerism, *Benzenes.

An account of the researches in the application of catal-
ysis to organic chemistry pursued by N. D. Zelinskii
during 57 years up to 1941 is given, including investiga-
tions of some of his students. The investigations of his
school are reviewed pertaining to the phenomenon of
selective dehydrogenation leading to formation of
aromatics from naphthenes at 300°C, but leaving unaf-
fected those naphthenes which cannot be converted into
(Chemistry--Organic, TT, v. 6, no. 8) (over)

61-16915

1. Title: Naphthene
1. Balandin, A. A.

185125

Office of Technical Services

62-10887

Frank-Kamenetskii, D. A.
KINETICS OF COMPLEX REACTIONS. I. HOMO-
GENEOUS REACTIONS. [1962] 9p. 88 refs.
Order from OTS or SLA \$1.10 62-10887

[Condensed] trans. of Uspekhi Khimii (USSR) 1941,
v. 10, no. 4, p. 373-415.

DESCRIPTORS: *Reaction kinetics, *Hydrocarbons,
Polymerization, Decomposition, Catalysis,
Bibliography.

(Chemistry--Physical), TT, v. 8, no. 7)

I. Frank-Kamenetskii, D. A.
II. Title: Homogeneous ...

Office of Technical Services

62-10888

Frank-Kamenetskii, D. A.
KINETICS OF COMPLEX REACTIONS. II. HETERO-
GENEOUS REACTIONS. [1961] 4p. 37 refs.
Order from OTS or SLA \$1.10 62-10888

Condensed trans. of Uspekhi Khimii (USSR) 1941,
v. 10, no. 5, p. 544-558.

DESCRIPTORS: *Reaction kinetics, *Chemical
reactions.

(Chemistry--Physical, TT, v. 7, no. 12)

I. Frank-Kamenetski, D. A.
II. Title: Heterogeneous ...

Office of Technical Services

62-10889

Bogdanov, I. F.
ACADEMICIAN ALEKSEI EVGRAFOVICH FAVOR-
SKII, STALIN PRIZE LAUREATE. [1961] 4p. 14 refs.
Order from OTS or SLA \$1.10 62-10889

Condensed trans. of Uspekhi Khimii (USSR) 1941,
v. 10, no. 6, p. 654-661.

DESCRIPTORS: *Rubber, *Isoprene, Acetylenes,
Isomeric transitions, Polymers.

(Chemistry--Organic, TT, v. 7, no. 12)

I. Bogdanov, I. F.
II. Favorovskii, A. E.

Office of Technical Services

Spontaneous Fission of Uranium, by L. I.
Rusinov, 11 pp.

RUSSIAN, per, Uspekhi Khim, Vol X, 1941,
pp 662-670.

AEC CP-2250

Sol - Major Chem
20 Oct 60

129,740

62-10890

Kuz'minskii, A. S.
OXIDATION OF RUBBER POLYMERS. [1961] 4p.
27 refs.

I. Kuz'minskii, A. S.

Order from OTS or SLA \$1.10 62-10890

Condensed trans. of Usp[ekhi] Khim[i] (USSR) 1941,
v. 10, no. 7, p. 825-844.

DESCRIPTORS: *Polymers, *Rubber, Oxidation,
Oxygen, Diffusion, Sulfur, Vulcanization, Rubber
plasticizers.

(Chemistry--Organic, TT, v. 7, no. 12)

Office of Technical Services

Plate, A. F.
METHODS OF PREPARATION OF TOLUENE. [1961]
25p. 138 refs.
Order from OTS or SLA \$2.60

61-16977

Trans. of Uspekhi Khimii (USSR) 1943, v. 12,
p. 189-208.

DESCRIPTORS: *Toluenes, Synthesis.

A review of Russian and non-Russian published information on the methods of preparation of toluene is given, including its isolation from coal tar and from natural petroleum, as well as production by pyrolysis of natural hydrocarbon gases, processing of cracked gases, pyrolysis of fractions of petroleum oil, destructive hydrogenation of coal and shales, conversion of other aromatics, catalytic dehydrogenation of methylcyclohexane and catalytic cyclization of heptane. The highest yield of coal tar toluene corresponds to a coking temperature of 700 or 800°. (Author)
(Chemistry--Organic, TT, v. 6, no. 7)

61-16977

I. Plate, A. F.

10177

Office of Technical Services

Frost, A. V.
CATALYTIC AND CONTACT METHODS OF DESUL-
FURIZATION OF OIL PRODUCTS. [1961] 6p. 40 refs.
Order from OTS or SLA \$1.10 61-16926

Condensed trans. of Uspekhi Khimii (USSR) 1943,
v. 12, p. 209-215.

DESCRIPTORS: *Oils, *Sulfur, Separation, *Catalysts,
*Hydrogenation, Decomposition, Gasoline, Kerosene,
Impurities:

A review of methods of desulfurization is given, includ-
ing hydrogenation, thermal decomposition of sulfur
compounds, bauxite treatment, desulfurization with
phosphoric acid on coke, treatment with oxides of
aluminum or zinc, clay refining, copper salt process
and treatment with iron ore. Concerning the last men-
tioned method, it is asserted that iron-containing con-
tacts may give a complete desulfurization of oil dis-
(Engineering--Chemical, TT, v. 6, no. 8) (over)

61-16926

1. Title: Desulfurization
I. Frost, A. V.

165126

Office of Technical Services

Uspekhi Khimii, XII, No. 4, 1948,
p. 253

V.V. Lebedevskiy, "Ya. K. Syrkis"

NOV 1 1950

Usp. Khim., No 7, 1943 P. 295-255

"Stalin Laureates in Chemistry
for 1943" V.V. Ladinshiy

NOV 1 1950

Electrokinetic Phenomena Applied to the Electro-
Dialysis Process. by I. I. Zhukov.
RUSSIAN, per, Uspekhi Khimii, Vol 12, No 4, 1943,
pp 265-286.
NLL 5828.4F (11848)

Sci - Chem

Aug. 67

Sept.

338,651

178/60

(NY-4708)

Chemiluminescence of Flames, by V. Kondrat'yev,
25 pp.

RUSSIAN, per, Uspekhi Khim, Vol XIX, No 4, 1943,
pp 308-317.

JPRS 5539

Sci - Chem

Sep 60

126,087

TT-63-24283

Finkel'shtein, B. N.
VISCOSITY OF SOLUTIONS OF ELECTROLYTES
Bertha P. Klenova, tr. 13 Sep 62, 11p [TVA]-3992.
Order from OTS, SLA, or ETC \$1.60 TT-63-24283

Trans. of Uspekhi Khimii (USSR) 1943, v. 12,
p. 472-479.

DESCRIPTORS: *Electrolytes, Solutions, Viscosity,
Equations.

(Chemistry--Physical, TT, v. 11, no. 2)

I. Finkel'shtein, B. N.
II. TVA-3992
III. Tennessee Valley
Authority,
Wilson Dam, Ala.

Office of Technical Services

61-16892

I. Petrov, A. A.

Petrov, A. A.
RECENT PROGRESS IN THE FIELD OF THE
CHEMISTRY OF HALOGEN DERIVATIVES OF
1,3-DIENES. [1961] 37p. 234 refs.
Order from OTS or SLA \$3.60 61-16892

Trans. of Uspekhi Khimii (USSR) 1944, v. 13,
p. 203-233.

DESCRIPTORS: *Halogen compounds, *Ethylenes,
Physical properties, Chemical properties.

Synthesis and physical and chemical properties of
halogenated derivatives of 1,3-dienes are reviewed.

195118

Office of Technical Services

(Chemistry--Organic, TT, v. 6, no. 8)

Vsp Khim Vol 13, pp 234-52 (1964)

Internal Rotation + Rotational Isomerism

M. V. Val'Kenshtein.

AEC No. 313
Brookhaven